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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,199	03/05/2002	Barend Visser	P-1707	9601

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EXAMINER

MEDINA SANABRIA, MARIBEL

ART UNIT PAPER NUMBER

1754

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

LD

Office Action Summary

Application No.

09/914,199

Applicant(s)

VISSER, BAREND

Examiner

Maribel Medina

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20,21,23,24 and 26-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20,21,34 and 35 is/are allowed.
- 6) ☒ Claim(s) 23,24,26 and 30-33 is/are rejected.
- 7) ☒ Claim(s) 27-29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/13/2004 has been entered.

Amendment

2. The Amendment filed on 12/13/04 has been entered. Claims 22, and 25 have been canceled and new claim 35 has been entered.

Response to Arguments

3. Applicant's arguments, see Remarks filed on 12/13/04, with respect to claims 20-21 and 34-35 have been fully considered and are persuasive. The rejection to claims 20 and 21, under 35 USC 102 (b), as being anticipated by Lowther and the rejection to claim 34, under 35 USC 102(b), as being anticipated by Collins have been withdrawn.

4. Applicant's arguments filed on 12/13/04, with respect to claims 23, 24, 26, and 30-33 have been fully considered but they are not persuasive. Applicants argue that the references, Lowther and Collins, do not disclose that their devices are not capable of achieving the rate of change for the electric field of claim 23, i.e. "faster than 10kV/mm/10ns".

This argument is not convincing. The above-cited references, i.e. Loather and Collins, disclose all the structural limitations of the claimed apparatus, therefore the apparatuses of the references are capable of achieving the change of rate of electric field as instantly claimed.

Note, "A claim containing a "Recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 23-26, 30 and 31 are rejected under 35 U.S.C. 102(b) as anticipated by RE 30,320 (Lowther).

Lowther discloses an apparatus comprising a housing defining a passage (14) that extends from the inlet to the outlet of the housing (1); first and second electrodes (2 and 3) and a voltage pulse generating means (24) connected to the electrodes and comprising a circuit (See Figures 1, 3 and 4)). Regarding the limitation that reads "voltage pulse between the electrodes sufficient to cause an electric field between the electrodes to change at a rate faster than 10kv/mm/10ns". Lowther, discloses all the structural limitations of the claimed apparatus therefore the apparatus of the reference is capable of achieving the change of rate of electric field as instantly claimed.

Note, "A claim containing a "Recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).

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No difference is seen between the instantly claimed invention and Lowther disclosure.

7. Claims 23-26 and 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 4,869,881 (Collins).

Collins discloses an apparatus for producing ozone (see col. 5 line 37 - col. 6 line 56) comprising a housing (23); an electrically conductive tubular electrode (20) disposed in the housing (see figures 2-8); a passage for air; and a pulse generator. The conductive housing is connected to the secondary winding of a transformer (see figures 7-8). The housing is electrically insulated (see figures 9-12). The apparatus further comprises a timing unit including a MOSFET and capacitors (see col. 7, lines 6-61).

Regarding the limitation that reads “voltage pulse between the electrodes sufficient to cause an electric field between the electrodes to change at a rate faster than 10kv/mm/10ns”.

Collins, discloses all the structural limitations of the claimed apparatus therefore the apparatus of the reference is capable of achieving the change of rate of electric field as instantly claimed.

Note, “A claim containing a “Recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).

No difference is seen between the instantly claimed invention and Collins disclosure.

Allowable Subject Matter

8. Claims 20, 21, 34 and 35 have been allowed.

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9. Claims 27-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is an examiner's statement of reasons for allowance: Claims 20, 21, 34 and 35 are allowable upon consideration of applicants' arguments and reconsideration of the prior art.

Regarding claims 20 and 21, the prior art fails to disclose or suggest an electric field change at a rate faster than 10kV/mm/10ns.

Regarding claims 34 and 35 the prior art fails to disclose or suggest the switching device is connected to a gate of the FET.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

11. The following is a statement of reasons for the indication of allowable subject matter: Claims 27-29 discloses allowable subject matter. The prior art fails to disclose or suggest that the switching device is connected between the charge storage device and a gate of the FET.


Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maribel Medina whose telephone number is (571) 272-1355. The examiner can normally be reached on Monday through Friday from 7:30 AM to 4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (571) 272-1358. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Maribel Medina
Examiner
Art Unit 1754